Welcome

to the

Fairfield Rd. & Monaville Rd. Intersection Improvement

Stakeholder Involvement Group Meeting #2

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SIG Meeting Schedule

SIG Meeting #1
(Oct. 12, 2016)

- Discussed existing conditions, project limits, traffic data, crash data
- Workshopped to identify existing deficiencies
- Workshopped to identify potential solutions

SIG Meeting #2
(Today)

- Discuss preliminary design concepts
- Discuss evaluation criteria

SIG Meeting #3
(Future)

- Discuss the Preferred Alternative
- Refinement of the design

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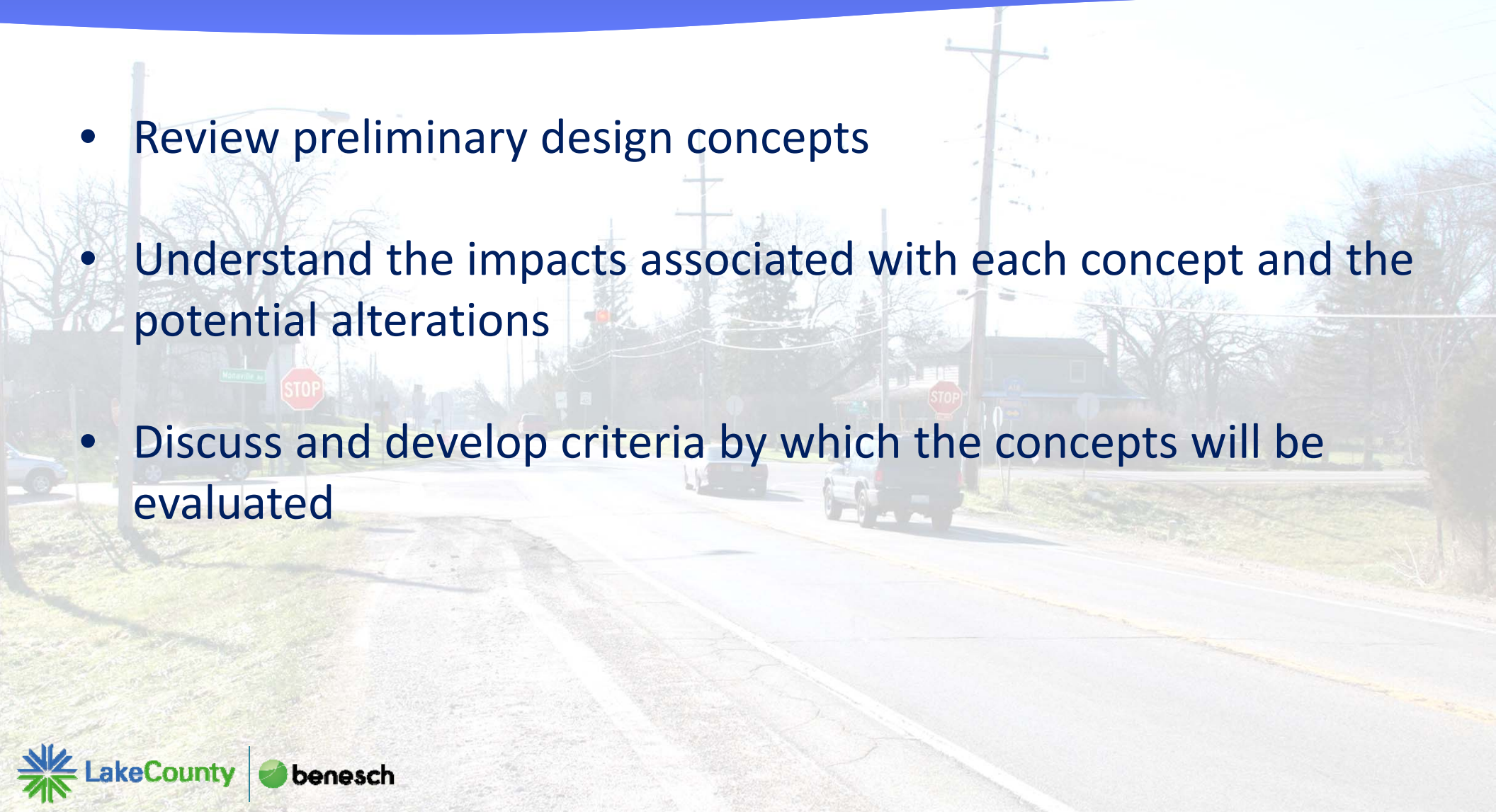
Today's Meeting Goals

- Review preliminary design concepts
- Understand the impacts associated with each concept and the potential alterations
- Discuss and develop criteria by which the concepts will be evaluated



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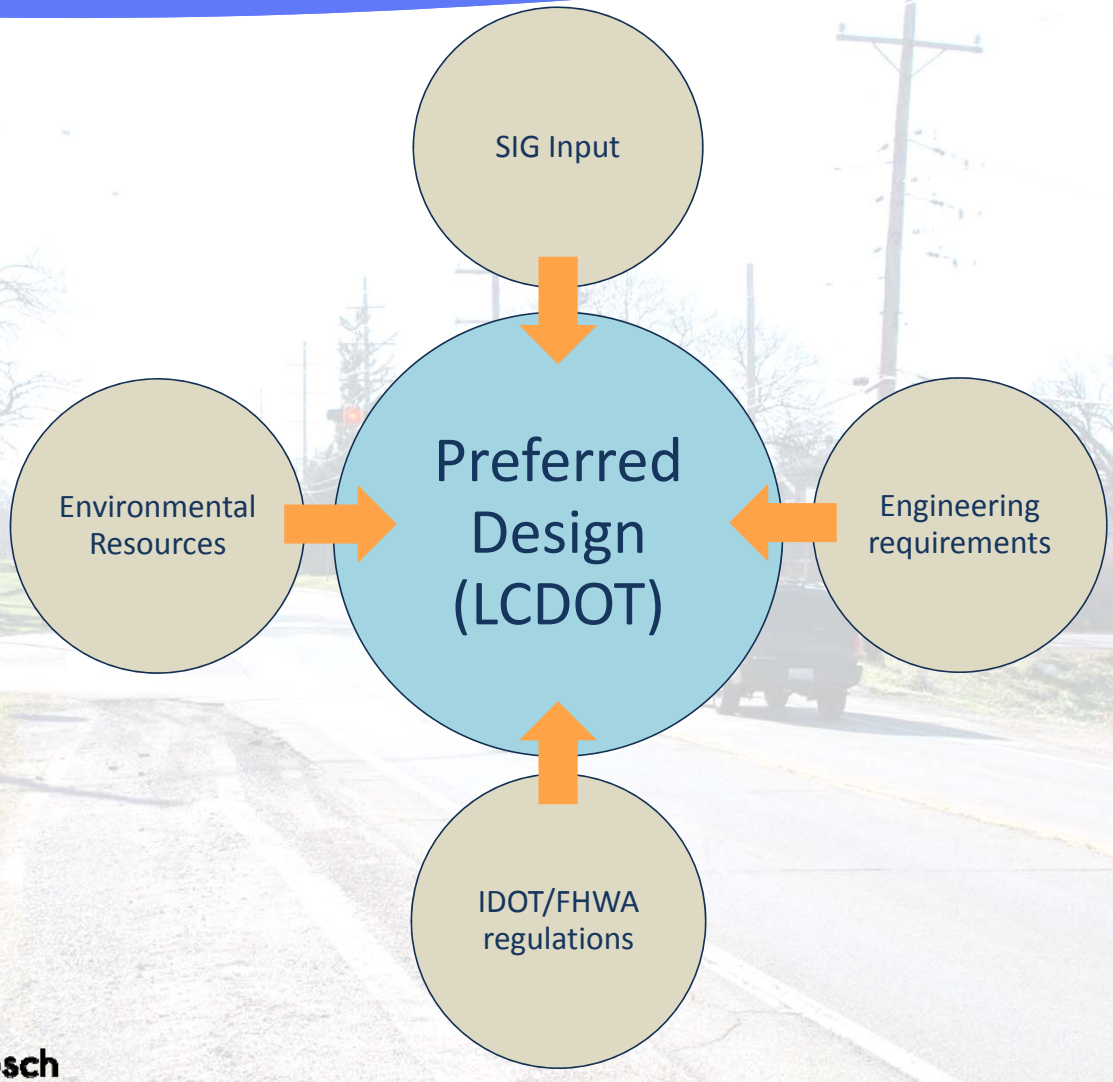
Development of a Preferred Alternative



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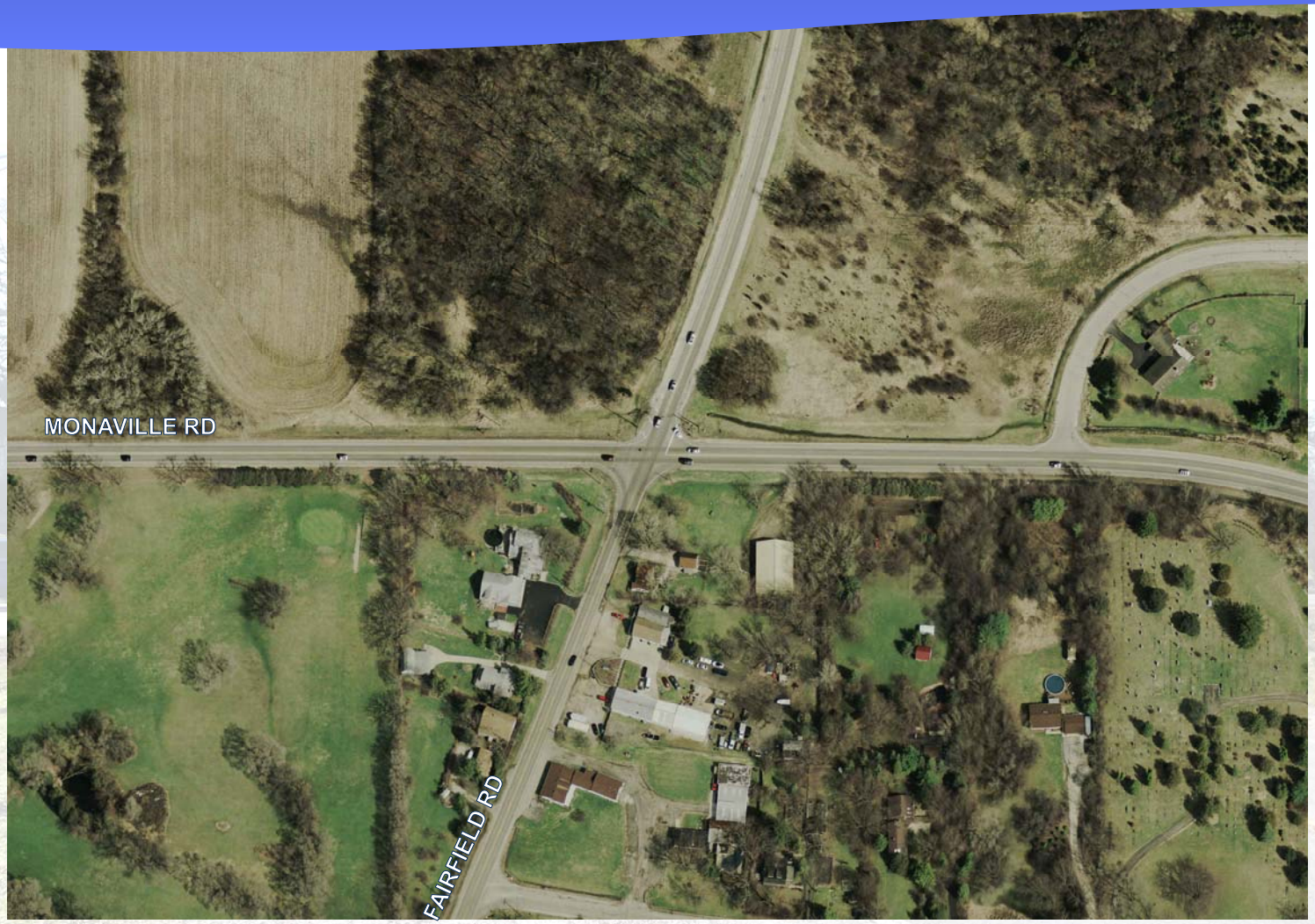
Concept 1 – Traffic Signal



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Concept 1 – Traffic Signal

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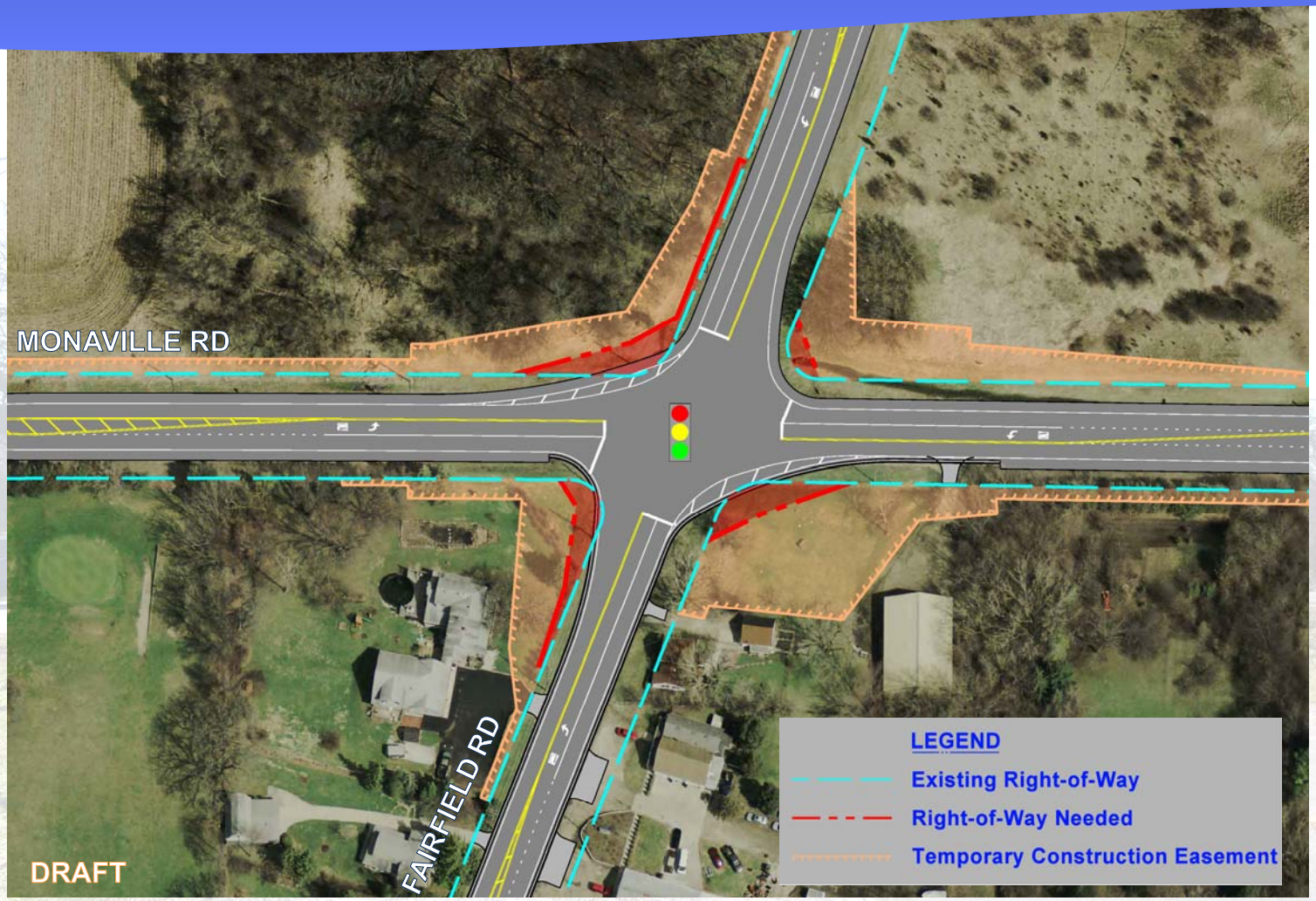
Concept 1 – Traffic Signal



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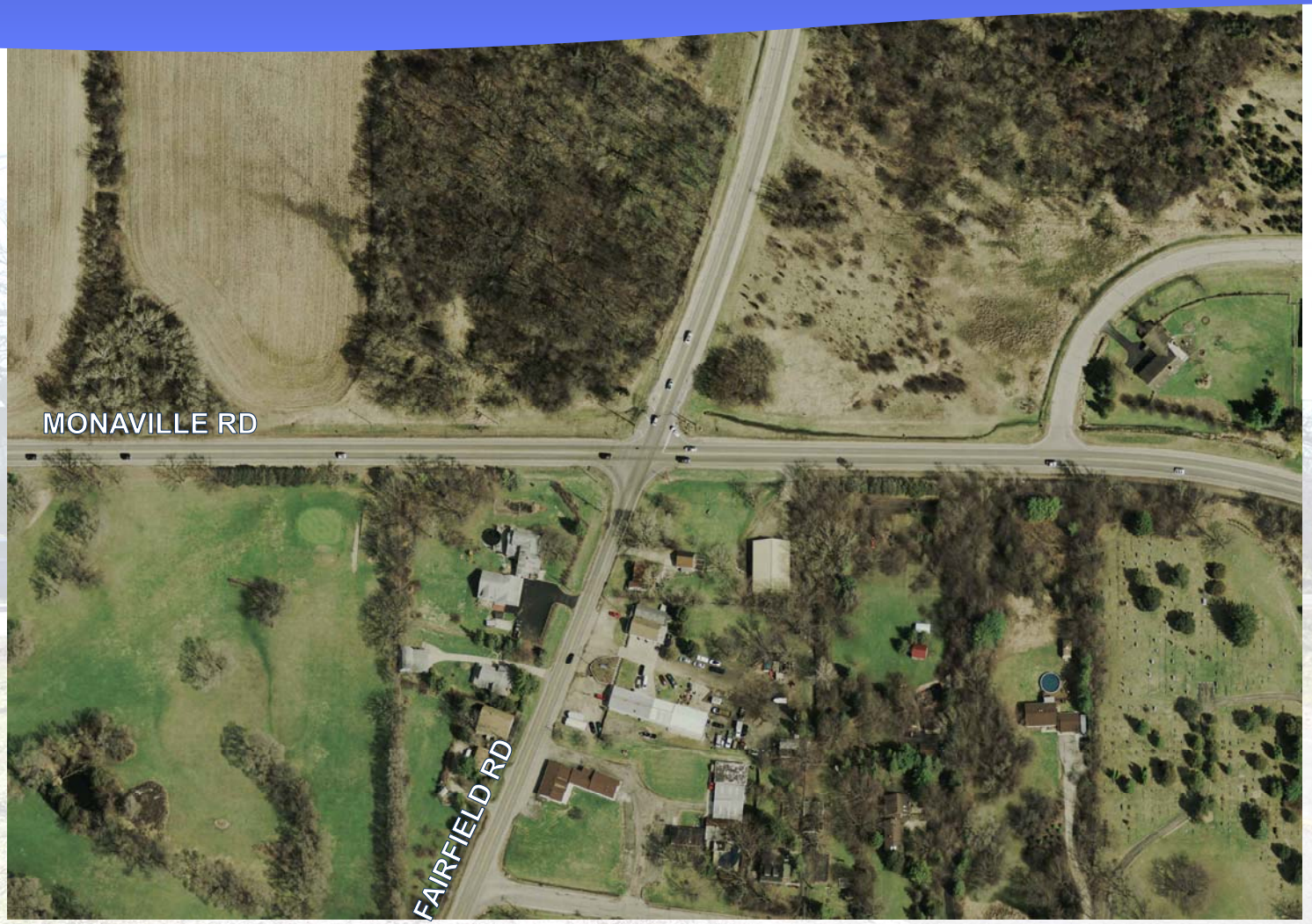
Concept 2 – Roundabout



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Concept 2 – Roundabout

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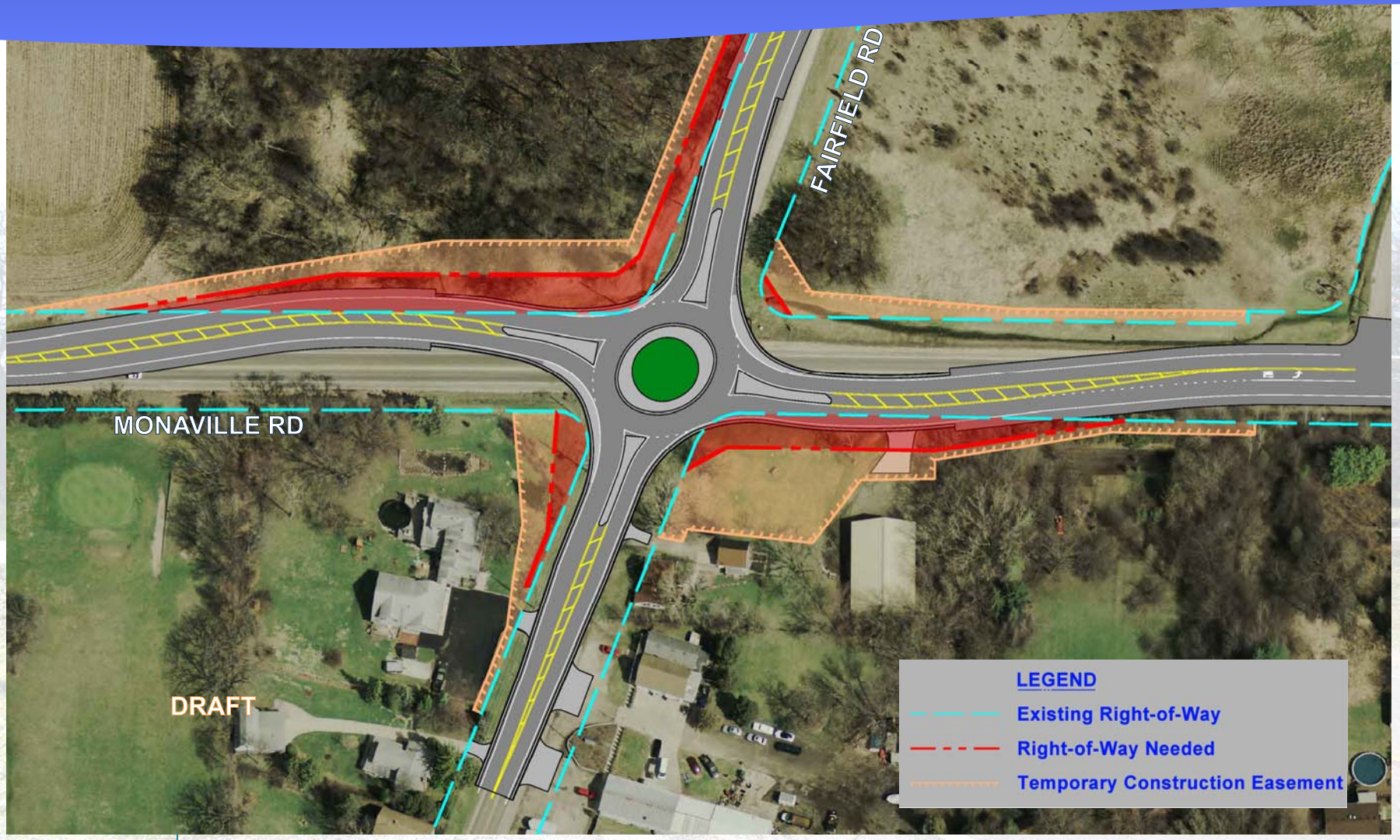

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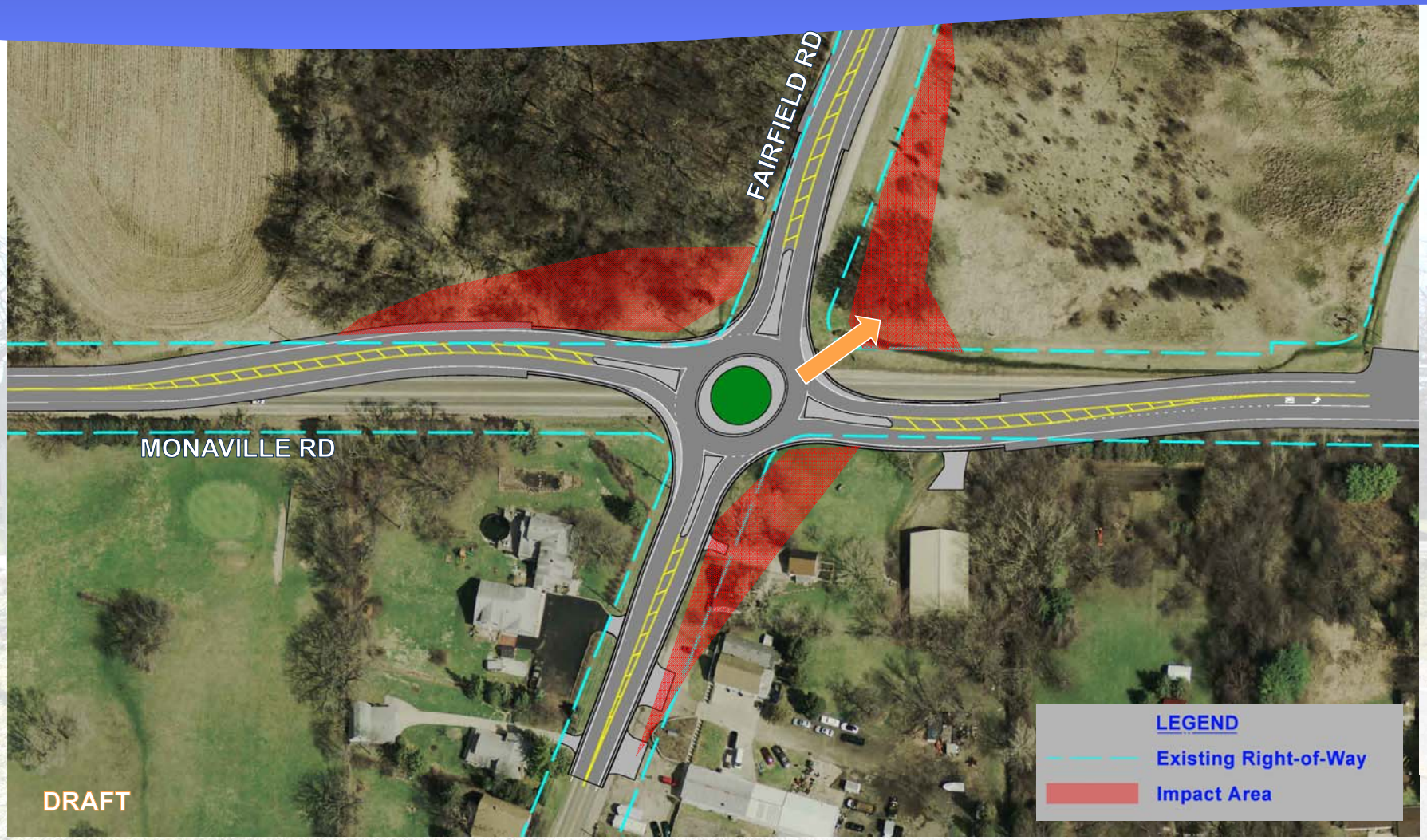
Roundabout: what if we move it around?



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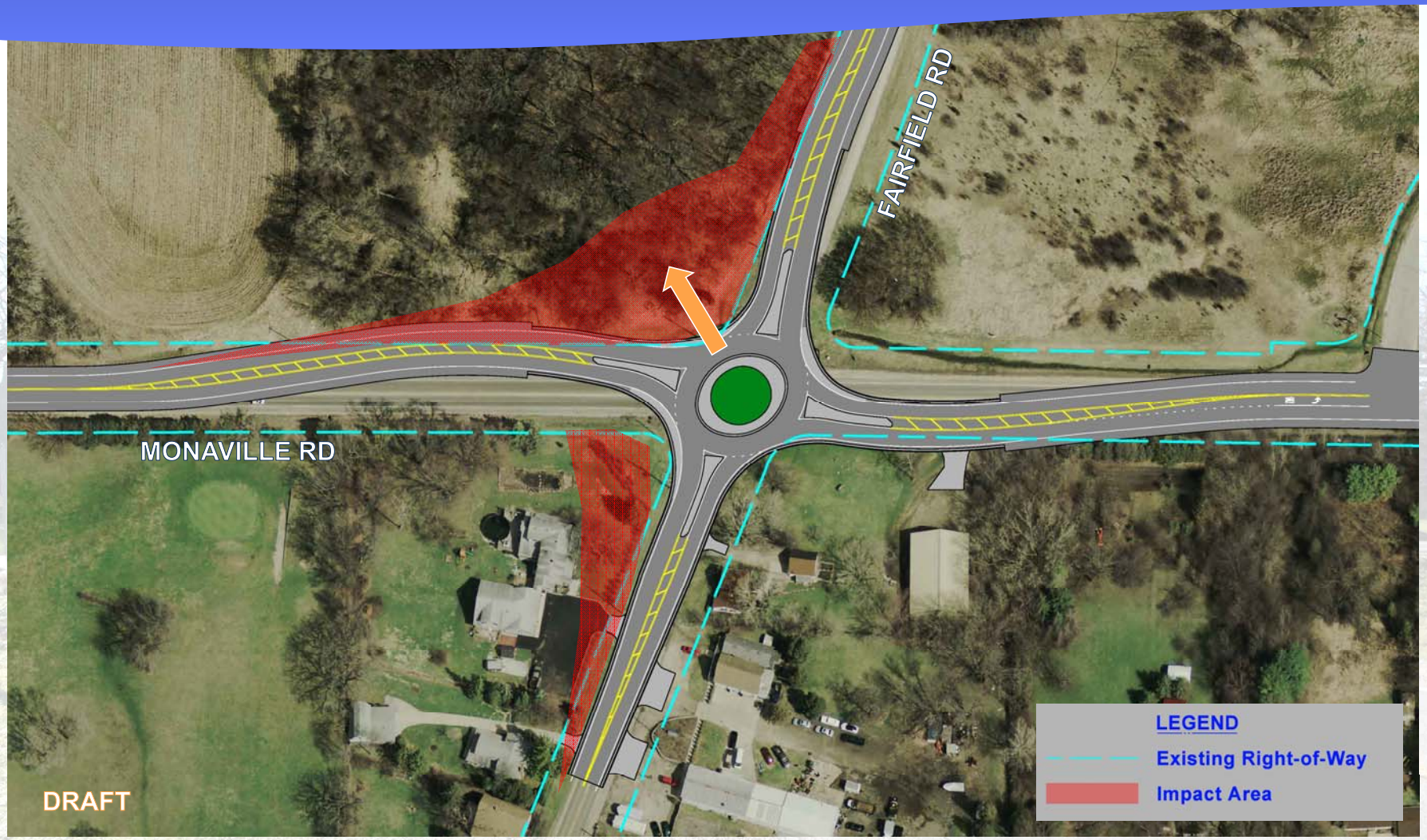

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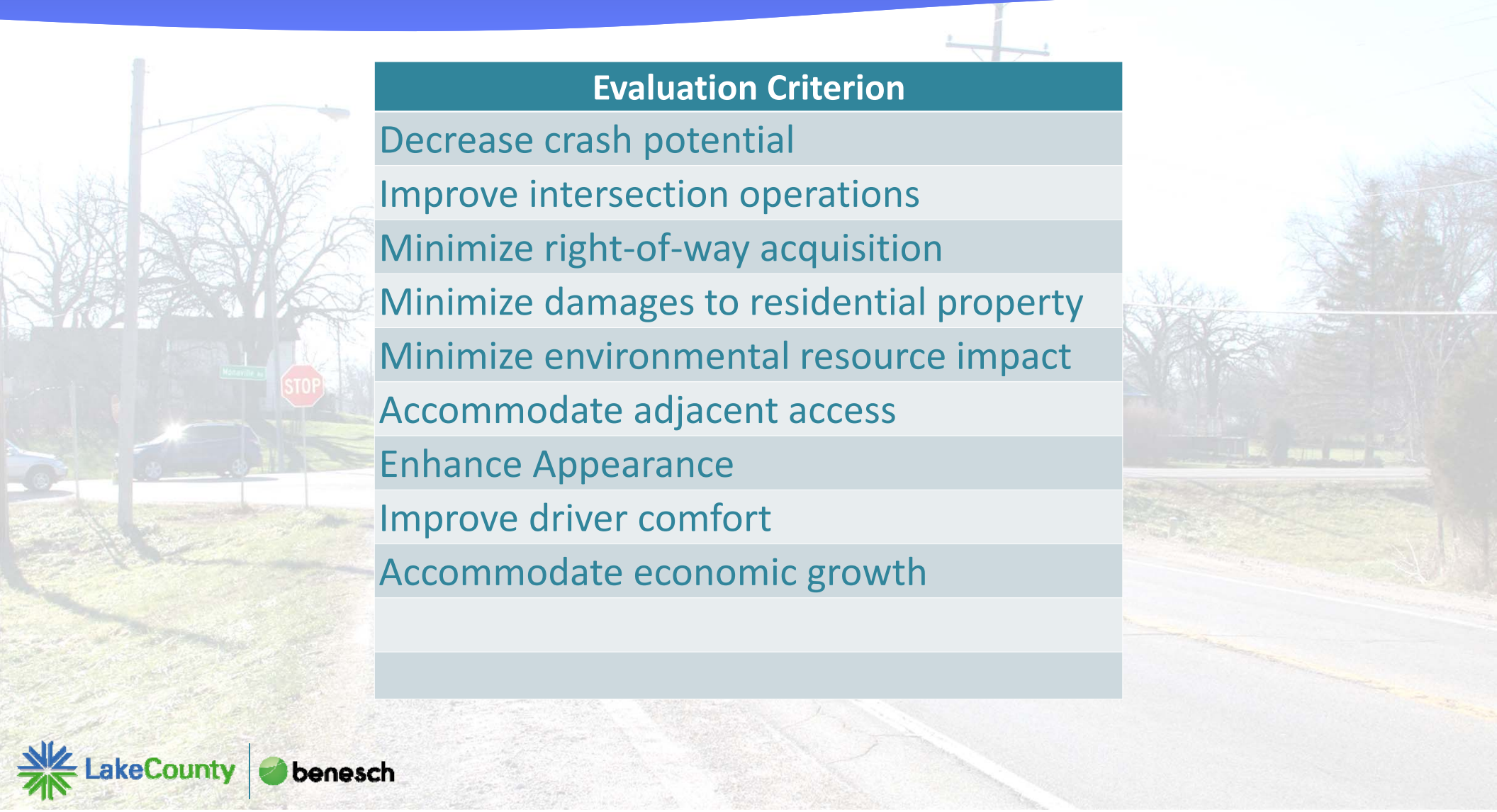
Group Discussion

What criteria should be used to compare the alternatives?

Evaluation Criterion
Decrease crash potential
Improve intersection operations
Minimize right-of-way acquisition
Minimize damages to residential property
Minimize environmental resource impact
Accommodate adjacent access
Enhance Appearance
Improve driver comfort
Accommodate economic growth



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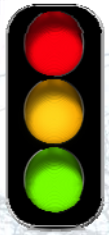
Impacts on crash potential



- Assigns right-of-way
- Tends to increase rear end crashes

5% - 45% overall reduction in crashes compared to an all-way stop*

- Reduces conflict points: conflicting vehicles only approach from one direction
- Reduces severity of crashes by keeping vehicle speeds low and limiting the crash type

60% - 70% overall reduction in crashes compared to an all-way stop*

*Source: FHWA Crash Modification Factors Clearinghouse

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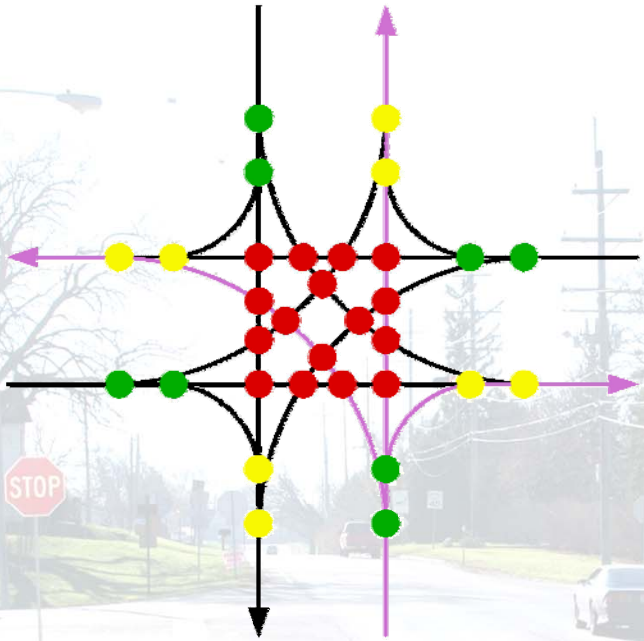
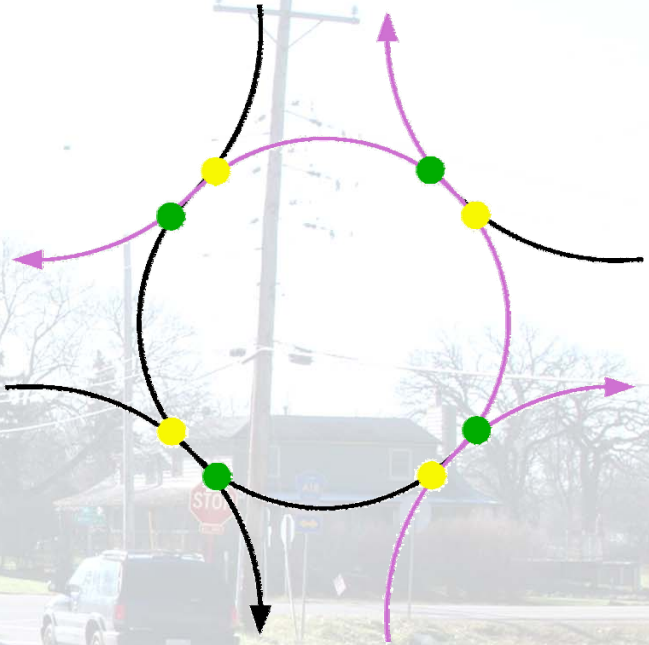
Impacts on crash potential

Vehicle conflict points





Conflict Type	Conventional Intersection	Roundabout
Diverge	8	4
Merge	8	4
Crossing*	16	0
Total	***32***	***8***

*Crashes of this type are more severe

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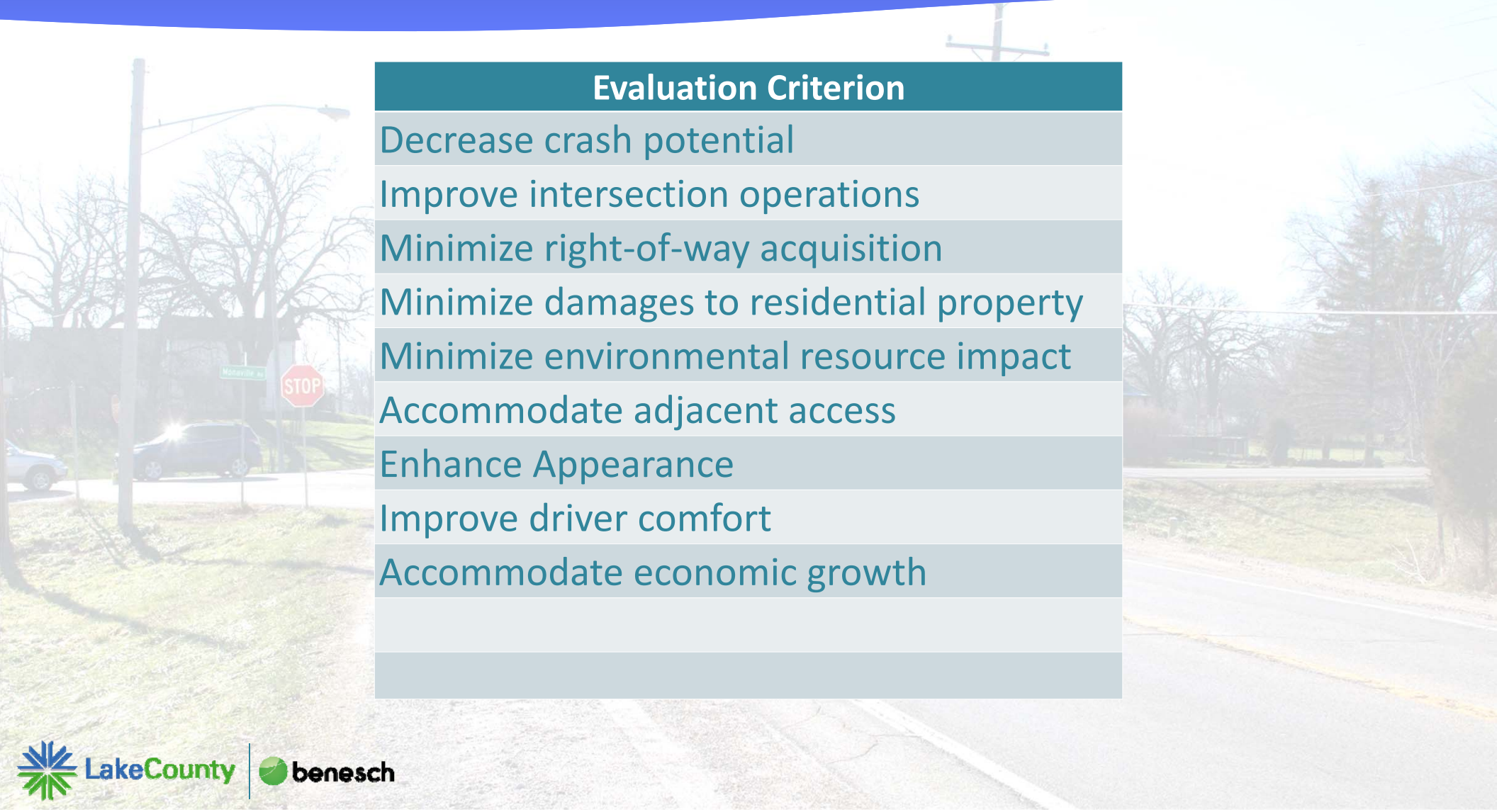

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Comparison: traffic operations

Intersection Scenario		Average delay per vehicle during the busiest hour
Existing condition:	All-way stop	61 seconds
Future condition:	All-way stop	151 seconds
Future condition:	Traffic signal	28 seconds
Future condition:	Roundabout	16 seconds

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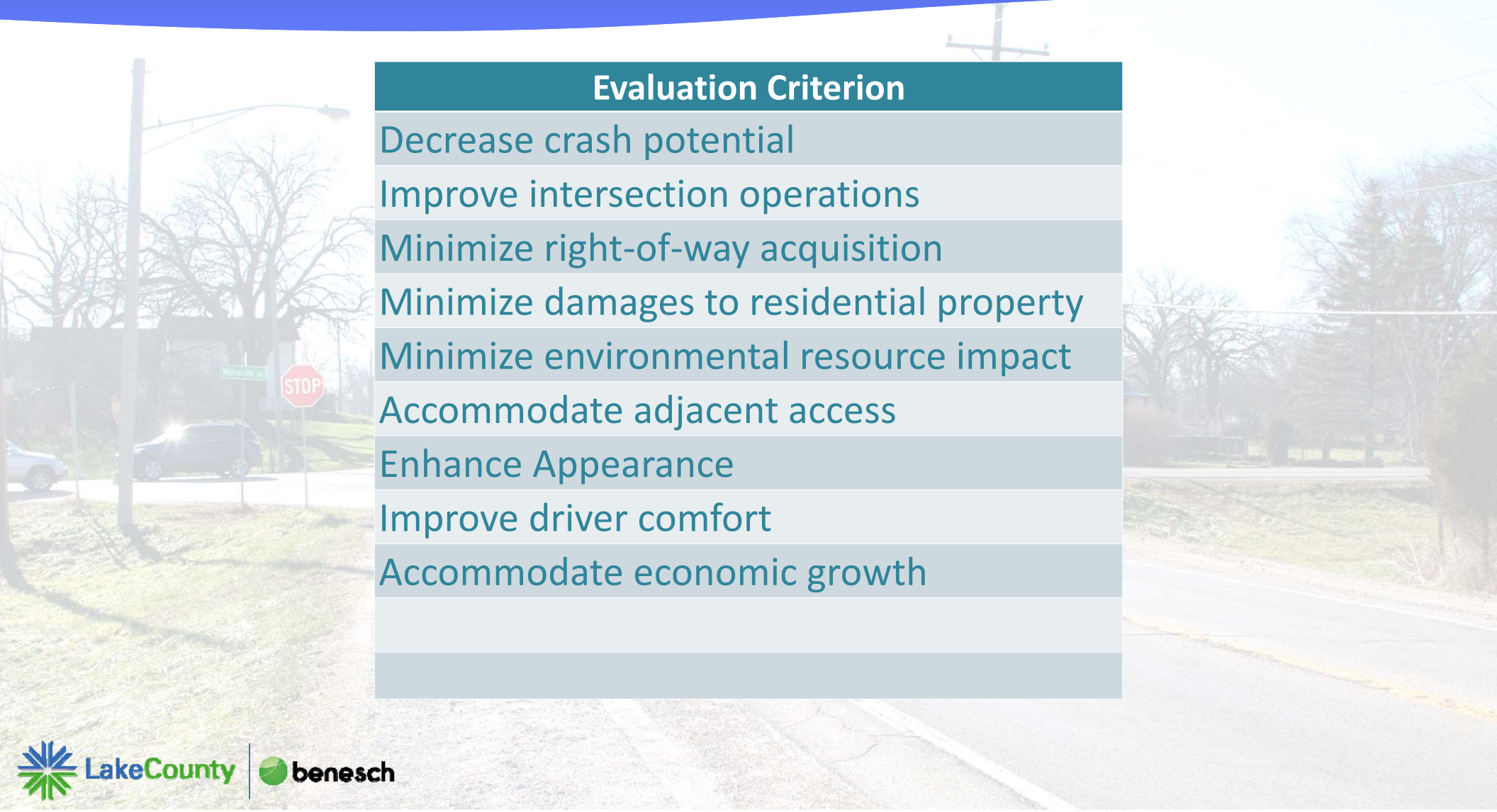

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Project Schedule

NOTE:
Project dates are dependent upon project readiness and the availability of funding

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